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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,054	02/20/2004	Hans Joachim Langhoff	60,130-2012;02MRA0356	6861
26096	7590	06/08/2006	EXAMINER	
CARLSON, GASKEY & OLDS, P.C. 400 WEST MAPLE ROAD SUITE 350 BIRMINGHAM, MI 48009			HONG, JOHN C	
			ART UNIT	PAPER NUMBER
			3726	

DATE MAILED: 06/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application N .	Applicant(s)	
	10/784,054	LANGHOFF ET AL.	
	Examiner	Art Unit	
	John C. Hong	3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,3 and 22-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,3,22-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2,3,22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lienert et al. (U.S. Patent 4,160,851) in view of 2004/0175593.

Lienert et al. teach a method for manufacturing a vehicle body panel, comprising: applying a plastic film onto a reverse side of a film-like exterior covering (col.2, lines 9-19); hardening the plastic film (col. 2, lines 13-14); applying a back-foamed layer on top of the hardened plastic film (col. 10, lines 63-65); the plastic film is applied by a spraying process (col. 10, lines 63-65); the step of applying the back-foamed layer comprises: applying liquid plastic onto the plastic film after the hardening step; and foaming the liquid plastic to form the back-foamed layer on the plastic film. (col.1, line 61-col. 2, line 19 ;col.2, line 14, col.9, line 56; col.10, lines 63-65).

Lienert et al. fail to teach the step of adding fiber to the back-foamed layer by a long fiber injection method, wherein the plastic film prohibits fibers from causing imperfections in an exterior surface of the vehicle body panel.

'593 teaches the step of adding fiber to the back-foamed layer by a long fiber injection (LFI) method (page 17, Paragraph [0178] and [0184], this LFI is mentioned in the specification page 1, [5] of the present application).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the step of adding fiber to the back-foamed layer by a long fiber injection method, as taught by '593 on the method of Lienert et al. so as to reinforcing the panel.

Regarding the limitation of the plastic film prohibits fibers from causing imperfections in an exterior surface of the vehicle body panel, it is well known in the art utilizing the plastic film to prohibit fibers from causing imperfections in an exterior surface, and It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the plastic film of Lienert et al. so as to prohibit the imperfection of the exterior.

3. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lienert et al. /'593 as applied to claim 22 above, and further in view of Wieschermann et al. (U.S. Patent 6,623,068).

Lienert et al. /'593 teach the limitation except the step of adding the fiber by placing fiber mat onto the hardened plastic film before the step of the back-foamed layer.

Wieschermann et al. teach the step of adding the fiber by placing fiber mat onto the hardened plastic film before the step of the back-foamed layer (col.3, lines 20-28).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the step of adding the fiber by placing fiber mat onto the hardened plastic film before the step of the back-foamed layer, as taught by Wieschermann et al. on the method of Lienert et al. /'593. so as to achieve shape determining support on the panel.

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4. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lienert et al. /'593 as applied to claim 22 above, and further in view of Reedy (U.S. Patent 5,707,571). Lienert et al. /'593 teach the limitation except the step of adding the fibers by mixing with material used to form the back-foamed layer.

Reedy teaches the step of adding the fibers by mixing with material used to form the back-foamed layer col.1, lines 25-37).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the step of adding the fibers by mixing with material used to form the back-foamed layer, as taught by Reedy on the method of Lienert et al. /'593 so as to reinforce the plastic body.

5. Claims 26 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lienert et al. (U.S. Patent 4,160,851) in view of Melchert (U.S. Patent 4,544,126).

Lienert et al. teach method for manufacturing a vehicle body panel, comprising: applying a plastic film onto a reverse side of a film-like exterior covering, hardening the plastic film; and applying a back-foamed layer on top of the hardened plastic film. wherein the steps of applying the plastic film, hardening the plastic film, and applying the back-foamed layer are conducted in the open foam die (col.1, line 61-col. 2, line 19 ;col.2, line 14, col.9, line 56;col.10, lines 63-65).

But Lienert et al. fails to teach that film-like exterior covering is disposed in an open foam die and the open foam die comprises an upper mold half and a lower mold half, and wherein the step of applying the back-foamed layer comprises molding the back-foamed layer against the upper mold half to form varying thicknesses in the back-foamed layer, hardening the

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plastic film such that plastic film prohibits fibers from causing imperfections in an exterior surface of the vehicle body panel and utilizing liquid foamable material for forming foamed layer.

Melchert teaches exterior covering is disposed in an open foam die and the open foam die comprises an upper mold half (50) and a lower mold half (30), and wherein the step of applying the back-foamed layer comprises molding the foamed layer against the upper mold half to form varying thicknesses in the foamed layer (Fig. 3; abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize film-like exterior covering is disposed in an open foam die and the open foam die comprises an upper mold half and a lower mold half, and wherein the step of applying the back-foamed layer comprises molding the foamed layer against the upper mold half to form varying thicknesses in the foamed layer, as taught by Melchert on the method of Lienert et al. so as to a frame member and a multitude of cavities may be embedded.

Regarding the limitation of hardening the plastic film such that plastic film prohibits fibers from causing imperfections in an exterior surface of the vehicle body panel, it is well known in the art utilizing the plastic film to prohibit fibers from causing imperfections in an exterior surface, and It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the plastic film of Lienert et al. so as to prohibit the imperfection of the exterior.

Regarding limitations of utilizing liquid foamable material for forming foamed layer is well known in the art utilizing liquid foamable material like liquid polyurethane (US 6500369 col. 4, lines 13 and 14), and It would have been obvious to one of ordinary skill in the art at the

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time the invention was made to utilize liquid foamable material for forming foamed layer on the method of Lienert et al. so as to form a greater thickness.

4. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lienert et al. /Melchert as applied to claim 26 above, and further in view of Belanger et al. (U.S. Patent 5,612,117).

Lienert et al. /Melchert teach the limitations except the step of placing at least one insert into the open foam die before the step of applying the back-foamed layer, at least one insert is embedded into the back-foamed layer after the step of applying the back-foamed layer.

Belanger et al. teach the step of placing at least one insert (25) into the open foam die before the step of applying the back-foamed layer, at least one insert is embedded into the back-foamed layer after the step of applying the back-foamed layer (Fig. 2; col.7, lines 1-9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the step of placing at least one insert into the open foam die before the step of applying the back-foamed layer, at least one insert is embedded into the back-foamed layer after the step of applying the back-foamed layer, as taught by Belanger on the method of Lienert et al. /Melchert so as to lock the structure solidly.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John C. Hong whose telephone number is 571-272-4529. The examiner can normally be reached on M-F(07:00-16:30)First Friday Off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on 571-272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



John C. Hong
Primary Examiner
Art Unit 3726

jh
May 29, 2006